

In the specification:

Please replace paragraph 1 with the following paragraph of the same number:

A1

This application claims the benefit of Provisional Patent Application Serial No. 60/204,203, filed on May 15, 2000, entitled "Parallel Architecture for Graphics Primitives Decomposition," which is incorporated herein by reference. The present application also is related to and incorporates by reference co-pending U.S. Patent Application Serial No. 09/858,306, by Daniel H. McCabe, entitled "Graphics Primitive Decomposition Using Edge Functions and Recursive Tile Subdivision", filed on May 15, 2001.

Please replace paragraph 54 with the following paragraph of the same number:

A2

To determine the tile corner farthest in the positive direction from the edge without having to perform the edge function, steps are taken to advantageously use a tile's symmetry. By placing a reference coordinate system at a center of the tile, the general edge function $e(x, y) = e_0 + n_x x + n_y y$ (equation (9)), provides a largest positive value when the terms $n_x x$ and $n_y y$ are absolute numbers given that e_0 is a constant. Thus in FIG. 8, a reference coordinate system 800 is placed in a center of tile R. Subsequently, coordinates of the four corners of tile R are $(-\Delta X/2, -\Delta Y/2)$, $(\Delta X/2, -\Delta Y/2)$, $(-\Delta X/2, \Delta Y/2)$ and $(\Delta X/2, \Delta Y/2)$. As such, regardless of whether actual values of n_x and n_y are positive or negative, there exists a tile corner having a coordinate combination such that when the terms $n_x x$ and $n_y y$ are computed, results are positive. Given that the term e_0 is a constant, having positive terms $n_x x$ and $n_y y$ results in the largest value for an edge function. Accordingly, the edge function at the tile corner that is farthest in the positive direction from an edge can be evaluated by performing only one calculation.

Please replace paragraph 73 with the following paragraph of the same number:

The sequential logic circuit 1102 receives as input primitive edge functions and tile corner coordinates from the CPU 402 and memory 1014, respectively.

A3 The sequential logic circuit 1102 evaluates the edge functions at each corner of a tile to determine whether the tile is inside of a primitive. This evaluation is carried out according to the discussion corresponding to FIG. 8. If a tile is outside the primitive, the tile is disregarded from subsequent decomposition, and the graphics processor 1006 (via sequential logic circuit 1102), subsequently, receives new corner coordinates for a new tile.
